

Abstract of the Disclosure

A method and system separates components in individual signals, such as time series data streams. A single sensor acquires concurrently multiple individual signals. Each individual signal is generated by a different source. An input non-negative matrix representing the individual signals is constructed. The columns of the input non-negative matrix represent features of the individual signals at different instances in time. The input non-negative matrix is factored into a set of non-negative bases matrices and a non-negative weight matrix. The set of bases matrices and the weight matrix represent the individual signals at the different instances of time.